National Energy Efficiency Forum
National Press Club
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The Honorable John Hoeven
Governor of North Dakota

Good afternoon, and thank you for inviting me to be part of the U.S. Energy Association's 13th Annual Energy Efficiency Forum.

I'm truly pleased to be here, and I believe that this year's theme – Evolution of the Energy Economy: Ensuring Security and Stability - is not only right on the mark, but an issue of vital importance to our country.

America must drive an evolution of its energy economy, just as we did in the 1920s, when power plants sprouted across the nation and transmission lines began to weave their way across our continent.

Crucial lessons have brought us to this threshold:

- Political and military volatility in the Middle East has taught us that excessive reliance on foreign petroleum is a costly proposition - in political, military and economic terms.
- Concerns about the quality of our air and water continue to make the environment a priority for Americans of all political persuasions, and
- The rapid advance of technology has brought new, alternative energy resources well within reach.

Consequently, this new era in energy will be marked by burgeoning capacities, but it will also be marked by other distinctive characteristics as well that I would like to talk with you about today.

- Our evolution in energy will depend as never before on productive and creative partnerships between the public sector and private sector.
- It will require unprecedented investments in domestic energy resources, including a multiplicity of energy sources such as clean coal, petroleum and natural gas, as well as hydro, biodiesel, wind and other renewable sources.
- Evolution of our energy economy will require expansion of transmission infrastructure at a rate and in dimensions greater than we've seen in more than three generations, and it will depend on sophisticated, new technologies that were

unavailable just a few years ago. Yesterday's science fiction will become today's working technology.

- Evolution of our energy economy will mean responding to environmental concerns - on the drawing board, proactively rather than reactively, and we will need to seek unprecedented efficiencies in both production and consumption, very much the topic of today's discussion. In fact, efficiency will be a prime factor in leveraging our growth in energy production to meet our needs.

All of these factors will play themselves out in the evolution of national energy policy, but for me, they will play out in dramatic fashion in my own state of North Dakota. In fact, I believe that North Dakota can serve as a microcosm for macro-energy policy. I believe that responsible energy development is so important for our state that I have named energy development as one of the six pillars on which we will build our future in North Dakota.

Let me share a few facts with you about North Dakota:

- We are the sixth largest energy producing and exporting state in the nation.
- North Dakota is the ninth largest producer of coal, oil and natural gas.
- Our state is one of the nation's agricultural treasures, with abundant farmland producing crops necessary for ethanol and biodiesel fuels.
- And North Dakota is blessed with enormous open geographical area and an abundant supply of wind and water resources, available year-round for energy production.

In short, North Dakota is poised and ready to help meet America's energy challenge in ways that will make our people more prosperous, our environment cleaner, and our nation stronger.

For the next few minutes, let me talk about the things I believe we must do as a nation, in the context of how we are approaching these challenges and opportunities in North Dakota - both in terms of building our energy resources, and in terms of using energy more efficiently. To advance our energy policy in North Dakota, we have taken steps, with the Legislature, to promote a variety of clean, efficient energy resources. These include:

- Enrolling three major companies in Lignite Vision 21, a public sector, and private sector partnership to build new clean coal-fired power plants in the state.
- We revised the coal conversion tax to make our state's lignite coal more competitive, and at the Energy and Environmental Research Center at the University of North Dakota, we are engaged in research and development to make it burn cleaner and more efficiently.

- We are also the only state in the country with a plant that converts coal into natural gas and uses the byproduct, CO2, for tertiary recovery in the oil fields.
- We passed tax incentives for innovative, renewable energy resources, such as wind, geothermal and solar power.
- We reduced the fuel tax on biodiesel fuel sold in North Dakota to stimulate industry growth.
- We have authorized further development of the Cedar Hill Fields, the largest oil pool discovered during the last decade in the lower 48 states.
- And we have implemented programs to use renewable fuels in our state vehicle fleets, and improve the energy efficiency of state facilities.

These are the types of programs we must implement throughout the country to reach our energy goals. Let me tell you a little more about some of these goals.

The State of North Dakota formed Lignite Vision 21, a unique collaboration between the state and the Lignite Energy Industry. This partnership embodies a vision of the future for our state and region that takes the best technology available to meet the growing energy needs of our region. Our goal is to build new, state-of-the-art coal-fired electrical power plants within the next seven years.

New technologies will enable new plants to generate more electricity at lower cost – with emissions projected to be less than 10 percent of the emissions from existing plants. New plants will also be more efficient than existing facilities.

For North Dakota, the Lignite Vision 21 Program means thousands of good-paying jobs, a source of clean, reliable energy for our country, and a great stride in energy efficiency and energy independence for America.

In the same manner, we must develop our oil and natural gas resources as well. In 1973 when the oil embargo was imposed on our country, we imported 35 percent of the oil America consumed. Today we import almost 60 percent of our consumption. Clearly, we must develop new sources of domestic production, and do it in ways that are not only more efficient, but more environmentally friendly.

North Dakota is currently the ninth largest producer of oil and gas in the nation. In 2000 we pumped 33 million barrels of crude oil from more than 3,000 wells, employing thousands of people in our state.

New technologies, new discoveries, and new work in older fields have increased both the chance of finding oil and the efficiency of producing it. Today, every well being drilled in our state is using directional drilling techniques, that is, horizontally drilling to produce more oil while reducing dramatically the footprint, or impact, on our environment.

The oil industry has been environmentally responsible in North Dakota. About a quarter of the state's oil production and 30 percent of the industry's wells are on federal grasslands. In cooperation with the National Forest Service, the industry has restored over 500 wells and 480 miles of roads in the national grasslands – returning to the land to its natural state.

But traditional fossil fuels can only be a part of our state's and our nation's future. As a leading agricultural state, we're truly excited about the potential of alternative fuels derived from farm products as well.

Today, we're able to take renewables out of the realm of science fiction and put them squarely in the realm of the practical. Ethanol, biodiesel, wind and geothermal - all clean, domestic sources of energy - are under development in North Dakota and elsewhere. They've been around for years, but we haven't been able to take full advantage of them because of higher costs and limitations in transmission infrastructure.

But energy produced from alternative sources is becoming more accessible, more affordable, and more acceptable to the public. There is even evidence that consumers are willing to pay a little more for green energy.

Renewables, like conventional energy resources, will require partnerships – with government and with other industry sectors. For example, just as we have the coal industry in North Dakota working with the wind energy industry to partner on transmission infrastructure, we also have our agriculture industry working with ethanol producers to develop new processes and facilities.

Ethanol is a renewable energy resource, but its use also results in a cleaner environment, cleaner burning engines, and lower net carbon dioxide emissions, producing greater efficiency and a cleaner environment. Moreover, as ethanol reduces our country's dependence on foreign oil, it also provides an expanded marketplace for farmers and provides economic opportunities for rural areas. In North Dakota, all of our state Department of Transportation vehicles now use ethanol-blended fuel.

Biodiesel fuel is less developed, but it is gaining ground, both in our state and nationally. Biodiesel is an alternative to traditional petroleum diesel fuel. It is a biodegradable, combustible liquid fuel that is derived from fats and oils, such as soybean oil or recycled cooking oils. It is suitable for blending with petroleum diesel fuel for use in any existing, unmodified diesel engine. The benefits of biodiesel are similar to those of ethanol, in that it reduces our dependence on foreign oil, increases efficiency, enhances agricultural revenue, and creates jobs.

In North Dakota, our state motor pool has tested biodiesel successfully and we are currently using a 20 percent biodiesel blend in all of our Fargo district based diesel equipment.

Last year, our state Legislature passed a bill that calls for the Legislative Council to study the use of biodiesel fuel in North Dakota. The bill outlines the scope of the study which includes, an analysis of biodiesel fuel's operational impact on engines; the impact on engine warranties; fuel economy; the impact its use would have on the agricultural and general business communities, and environmental impacts.

A recent grant from the state Department of Commerce, combined with funding from the North Dakota Soybean Council and Soybean Growers, is financing the study, which will be conducted by researchers from North Dakota State University.

Clearly, alternative fuels will be very much a part of the energy mix in the future. Just as we are moving forward with ag based fuels, we must also move forward aggressively with wind energy.

Wind energy offers significant economic and environmental benefits, for both North Dakota and the nation: job creation (both in the construction phase and the ongoing operation and maintenance phase); local and state tax revenue; and landowner lease payments - an important consideration for farmers, ranchers, and other landowners.

There are, however, serious challenges to large-scale wind energy development. We must be able to harvest it cost-effectively and deliver it to market. That requires investment not only in new technologies, but also development of transmission infrastructure. To do that government, both state and federal, must offer incentives to the traditional power providers and the wind energy industry to work together in a collaborative fashion.

As we work to expand and diversify our energy production, energy efficiency – a major subject of this forum - will continue to be a crucial part of the mix. The very important work being done by Johnson Controls, and others, exemplifies just how significant heightened efficiency has been - and will continue to be - in fostering greater energy independence and a cleaner environment.

Every business has come to learn that energy is a large expense for facilities. If a business can lower its utility costs, it can increase revenue and offer a more competitive product. Efficiency is no less important in government. In North Dakota, we have found that energy efficiency measures can save taxpayers 20 to 30 percent in energy consumption and costs.

Our State Energy Program, which is funded through an 80/20 U.S. Department of Energy grant on an annual basis, provides a wide variety of energy conservation programs to reduce the growth of energy demand.

In new construction North Dakota is exploring technologies that use less energy. Technologies such as ground source heat pumps systems and energy efficient lighting systems allow great control and comfort at a low operating cost. Our state Division of Community Services works with all new construction of state facilities to promote the use of energy-efficient equipment and construction. If new buildings are properly designed, they can often compete on a first-cost basis with conventional methods and, once constructed, operate at a much lower cost.

In existing facilities we use two methods to decrease energy consumption while saving hard to get capital dollars.

Our State Buildings Energy Conservation Program is one method. The ultimate objective of this program is to provide a funding mechanism for the purchase and installation of energy improvements that result in energy dollar savings. The money needed for construction is bonded through the state building authority and the debt is then retired from the energy cost savings.

Performance Contracting is the second method. Performance contracting is similar to the State Facility Energy Improvement Program. The difference is that the facility partners with an energy services company - such as Johnson Controls- to do the audit work, project implementation, measurement and verification. The money is borrowed through conventional methods. The energy services company also guarantees that the savings will be sufficient to retire the borrowed money.

Energy conservation not only shrinks utility budgets, but also leaves more dollars available for growth, such as new buildings and new technologies.

In summary, diversified resources, environmental responsibility, improved energy efficiency, and investment incentives – all of these factors will play a role in the evolution of our energy economy.

The progress we make today will not only provide for the security, independence, and quality of life we now enjoy, but it will also impact the lives of future generations. We need to get it right.

With constructive collaboration between state and federal government, as well as the private sector, we can get it right. We can look forward to a new generation of energy production marked by continuing economic prosperity and an exceptional quality of life for ourselves and for our children.